

ABSTRACT

CHIMERIC GABA_B RECEPTOR5

The present invention provides an isolated GABA_B receptor protein comprising at least one GABA_BR1a subunit and at least one GABA_BR2a subunit, characterized in that said GABA_B receptor has one high affinity agonist binding site and one low affinity agonist binding site. In particular the isolated recombinant GABA_B receptor protein expressed by the hGABA_BR1a/GABA_BR2 CHO cell line deposited at the Belgian Coordinated Collections of Microorganisms (BCCM) as CHO-K1 h-GABA-b R1a/R2 clone on August 22, 2003 with the accession number LMBP 6046CB. It is thus an object of the present invention to provide the hGABA_BR1a/GABA_BR2 CHO cell line deposited at the Belgian Coordinated Collections of Microorganisms (BCCM) as CHO-K1 h-GABA-b R1a/R2 clone on August 22, 2003 with the accession number LMBP 6046CB.

The invention also provides the use of the aforementioned cell line in a method to identify GABA_B receptor agonists using a functional or a binding assay. In particular in a radioligand-binding assay comprising the use of radiolabeled agonists such as for example ³H-GABA or ³H-baclofen.

In a particular embodiment the present invention provides the use of the aforementioned GABA_B receptor in a method to identify a high affinity GABA_B receptor agonist using a functional or a binding assay. In particular in a radioligand-binding assay comprising the use of radiolabeled agonists such as for example ³H-GABA or ³H-baclofen. Alternatively, the aforementioned binding assays are performed on cellular extracts, in particular cellular membrane preparations of the aforementioned cells.

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